

SEQUENCE LISTING

<110> Cashman, Neil
Paramithiotis, Eustache
Slon-Usakiewicz, Jacek
Haghishat, Ashkan
Pinard, Marc

<120> PRION PROTEIN PEPTIDES AND USES THEREOF

<130> 50111/002002

<150> 60/140,634
<151> 1999-06-23

<160> 34

<170> FastSEQ for Windows Version 4.0

<210> 1
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<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic peptide

<221> VARIANT
<222> (1)...(4)
<223> Xaa = Any Amino Acid

Sub A1
<400> 1
Xaa Tyr Tyr Xaa
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<210> 2
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1 5

<210> 3

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<223> Xaa = Any Amino Acid

<400> 3
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1 5 10

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1 5 10

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<221> VARIANT
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Tyr Tyr Xaa

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<221> VARIANT
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<223> Xaa = Any Amino Acid

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Tyr Tyr Xaa Tyr Tyr Xaa
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<221> VARIANT
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<223> Xaa = Any Amino Acid

<400> 8
Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

*Sub A
Cutter*

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<220>
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<221> VARIANT
<222> (1)...(28)
<223> Xaa = Any Amino Acid

<400> 9
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1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

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<221> VARIANT
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<223> Xaa = Any Amino Acid

<400> 10
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1 . 5 10 15
Tyr Tyr Xaa
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<210> 11
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<221> VARIANT
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<223> Xaa = Any Amino Acid

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Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa

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Sab Al Con
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<222> (1)...(19)

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Tyr Tyr Xaa

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<211> 22

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<221> VARIANT

<222> (1)...(22)

<223> Xaa = Any Amino Acid

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Tyr Tyr Xaa Tyr Tyr Xaa
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<210> 19
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<220>
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<221> VARIANT
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<223> Xaa = Any Amino Acid

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Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

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<221> VARIANT
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<223> Xaa = Any Amino Acid

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Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

Sub A1 C1
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1 5 10 15
Tyr Tyr Xaa
20 25 30

<210> 22
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid

<400> 22
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1 5 10 15
Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa

<210> 23
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(37)
<223> Xaa = Any Amino Acid

<400> 23
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa Tyr Tyr Xaa
35

Sub A
<210> 24
<211> 40
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<213> Artificial Sequence

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<223> Synthetic peptide

<221> VARIANT
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~~<400> 24~~

Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
35 40

~~<210> 25~~

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~~<212> PRT~~

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~~<400> 25~~

Xaa Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
1 5 10

~~<210> 26~~

~~<211> 264~~

~~<212> PRT~~

~~<213> Bos taurus~~

~~<400> 26~~

Met Val Lys Ser His Ile Gly Ser Trp Ile Leu Val Leu Phe Val Ala
1 5 10 15

Met Trp Ser Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly
20 25 30

Gly Trp Asn Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly
35 40 45

Gly Asn Arg Tyr Pro Pro Gln Gly Gly Trp Gly Gln Pro His
50 55 60

Gly Gly Gly Trp Gly Gln Pro His Gly Gly Trp Gly Gln Pro His
65 70 75 80

Gly Gly Gly Trp Gly Gln Pro His Gly Gly Trp Gly Gln Pro His
85 90 95

Gly Gly Gly Trp Gly Gln Gly Gly Thr His Gly Gln Trp Asn Lys
100 105 110

Pro Ser Lys Pro Lys Thr Asn Met Lys His Val Ala Gly Ala Ala Ala
115 120 125

Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr Met Leu Gly Ser Ala
130 135 140

Met Ser Arg Pro Leu Ile His Phe Gly Ser Asp Tyr Glu Asp Arg Tyr
145 150 155 160

Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln Val Tyr Tyr Arg Pro
165 170 175

Val Asp Gln Tyr Ser Asn Gln Asn Asn Phe Val His Asp Cys Val Asn
180 185 190

Ile Thr Val Lys Glu His Thr Val Thr Thr Thr Lys Gly Glu Asn
195 200 205
Phe Thr Glu Thr Asp Ile Lys Met Met Glu Arg Val Val Glu Gln Met
210 215 220
Cys Ile Thr Gln Tyr Gln Arg Glu Ser Gln Ala Tyr Tyr Gln Arg Gly
225 230 235 240
Ala Ser Val Ile Leu Phe Ser Ser Pro Pro Val Ile Leu Leu Ile Ser
245 250 255
Phe Leu Ile Phe Leu Ile Val Gly
260

<210> 27
<211> 253
<212> PRT
<213> Homo sapiens

<400> 27
Met Ala Asn Leu Gly Cys Trp Met Leu Val Leu Phe Val Ala Thr Trp
1 5 10 15
Ser Asp Leu Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
20 25 30
Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
35 40 45
Tyr Pro Pro Gln Gly Gly Trp Gly Gln Pro His Gly Gly Gly
50 55 60
Trp Gly Gln Pro His Gly Gly Trp Gly Gln Pro His Gly Gly Gly
65 70 75 80
Trp Gly Gln Pro His Gly Gly Trp Gly Gln Gly Gly Gly Thr His
85 90 95
Ser Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
100 105 110
Ala Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
115 120 125
Met Leu Gly Ser Ala Met Ser Arg Pro Ile Ile His Phe Gly Ser Asp
130 135 140
Tyr Glu Asp Arg Tyr Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln
145 150 155 160
Val Tyr Tyr Arg Pro Met Asp Glu Tyr Ser Asn Gln Asn Asn Phe Val
165 170 175
His Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr
180 185 190
Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg
195 200 205
Val Val Glu Gln Met Cys Ile Thr Gln Tyr Glu Arg Glu Ser Gln Ala
210 215 220
Tyr Tyr Gln Arg Gly Ser Ser Met Val Leu Phe Ser Ser Pro Pro Val
225 230 235 240
Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
245 250

Sub A1
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<210> 28
<211> 256
<212> PRT
<213> Ovis aries

<400> 28
Met Val Lys Ser His Ile Gly Ser Trp Ile Leu Val Leu Phe Val Ala

1 5 10 15
Met Trp Ser Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly
20 25 30
Gly Trp Asn Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly
35 40 45
Gly Asn Arg Tyr Pro Pro Gln Gly Gly Gly Trp Gly Gln Pro His
50 55 60
Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Pro His
65 70 75 80
Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly Trp Gly Gln Gly
85 90 95
Gly Ser His Ser Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met
100 105 110
Lys His Val Ala Gly Ala Ala Ala Gly Ala Val Val Gly Gly Leu
115 120 125
Gly Gly Tyr Met Leu Gly Ser Ala Met Ser Arg Pro Leu Ile His Phe
130 135 140
Gly Asn Asp Tyr Glu Asp Arg Tyr Tyr Arg Glu Asn Met Tyr Arg Tyr
145 150 155 160
Pro Asn Gln Val Tyr Tyr Arg Pro Val Asp Arg Tyr Ser Asn Gln Asn
165 170 175
Asn Phe Val His Asp Cys Val Asn Ile Thr Val Lys Gln His Thr Val
180 185 190
Thr Thr Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Ile Lys Ile
195 200 205
Met Glu Arg Val Val Glu Gln Met Cys Ile Thr Gln Tyr Gln Arg Glu
210 215 220
Ser Gln Ala Tyr Tyr Gln Arg Gly Ala Ser Val Ile Leu Phe Ser Ser
225 230 235 240
Pro Pro Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
245 250 255

<210> 29
<211> 254
<212> PRT
<213> Mus musculus

<400> 29
full AI core
Met Ala Asn Leu Gly Tyr Trp Leu Leu Ala Leu Phe Val Thr Met Trp
1 5 10 15
Thr Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
20 25 30
Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
35 40 45
Tyr Pro Pro Gln Gly Gly Thr Trp Gly Gln Pro His Gly Gly Gly Trp
50 55 60
Gly Gln Pro His Gly Gly Ser Trp Gly Gln Pro His Gly Gly Ser Trp
65 70 75 80
Gly Gln Pro His Gly Gly Trp Gly Gln Gly Gly Gly Thr His Asn
85 90 95
Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Leu Lys His Val Ala
100 105 110
Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr Met
115 120 125
Leu Gly Ser Ala Met Ser Arg Pro Met Ile His Phe Gly Asn Asp Trp
130 135 140
Glu Asp Arg Tyr Tyr Arg Glu Asn Met Tyr Arg Tyr Pro Asn Gln Val

145		150		155		160										
Tyr	Tyr	Arg	Pro	Val	Asp	Gln	Tyr	Ser	Asn	Gln	Asn	Asn	Phe	Val	His	
					165				170					175		
Asp	Cys	Val	Asn		Ile	Thr	Ile	Lys	Gln	His	Thr	Val	Thr	Thr	Thr	
					180				185					190		
Lys	Gly	Glu	Asn		Phe	Thr	Glu	Thr	Asp	Val	Lys	Met	Met	Glu	Arg	Val
					195			200					205			
Val	Glu	Gln	Met	Cys	Val	Thr	Gln	Tyr	Gln	Lys	Glu	Ser	Gln	Ala	Tyr	
					210			215			220					
Tyr	Asp	Gly	Arg	Arg	Ser	Ser	Ser	Thr	Val	Leu	Phe	Ser	Ser	Pro	Pro	
					225			230			235			240		
Val	Ile	Leu	Leu	Ile	Ser	Phe	Leu	Ile	Phe	Leu	Ile	Val	Gly			
					245				250							

<210> 30
<211> 254
<212> PRT
<213> *Mesocricetus auratus*

<400> 30
 Met Ala Asn Leu Ser Tyr Trp Leu Leu Ala Leu Phe Val Ala Met Trp
 1 5 10 15
 Thr Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30
 Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45
 Tyr Pro Pro Gln Gly Gly Thr Trp Gly Gln Pro His Gly Gly Gly
 50 55 60
 Trp Gly Gln Pro His Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 65 70 75 80
 Trp Gly Gln Pro His Gly Gly Trp Gly Gln Gly Gly Gly Thr His
 85 90 95
 Asn Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
 100 105 110
 Ala Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
 115 120 125
 Met Leu Gly Ser Ala Met Ser Arg Pro Met Met His Phe Gly Asn Asp
 130 135 140
 Trp Glu Asp Arg Tyr Tyr Arg Glu Asn Met Asn Arg Tyr Pro Asn Gln
 145 150 155 160
 Val Tyr Tyr Arg Pro Val Asp Gln Tyr Asn Asn Gln Asn Asn Phe Val
 165 170 175
 His Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr
 180 185 190
 Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Ile Lys Ile Met Glu Arg
 195 200 205
 Val Val Glu Gln Met Cys Thr Thr Gln Tyr Gln Lys Glu Ser Gln Ala
 210 215 220
 Tyr Tyr Asp Gly Arg Arg Ser Ser Ala Val Leu Phe Ser Ser Pro Pro
 225 230 235 240
 Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Met Val Gly
 245 250

<210> 31
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<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 31
Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr Tyr
1 5

<210> 32
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<212> PRT
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<220>
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<400> 32
Cys Tyr Tyr Arg
1

<210> 33
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<212> PRT
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<220>
<223> Synthetic peptide

<400> 33
Cys Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
1 5 10

full
at
un
<210> 34
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 34
Cys Lys Tyr Glu Asp Arg Tyr Tyr Arg Glu
1 5 10